

STUDIES IN THE EUPATORIEAE (ASTERACEAE). CLI.

A NEW GENUS, GRISEBACHIANTHUS.

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Eight species of eastern Cuba form a distinct endemic element recognized here as a new genus Grisebachianthus. The genus has the general habit and floral characters of the related Koanophyllon but seems uniquely specialized in the tomentose stems and leaf undersurfaces and in the strongly subimbricate phyllaries. The phyllaries are particularly notable in being more like some Vernonieae than like any of the related Critonioid forms. It is the phyllaries that most clearly distinguish the genus from all members of Koanophyllon including some having similar habits and some few having different types of subimbricate involucre. The genus can also be distinguished from most of Koanophyllon by the corolla lobes being narrower than long.

Grisebachianthus R.M.King & H.Robinson, genus novum
Asteracearum (Eupatorieae). Plantae frutescentes
paucè ramosae. Caules teretes minute striati. Caules
et folia subtus dense tomentosa vel villosa. Folia
opposita plerumque breviter petiolata; lamina ovatis
vel deltoideis supra subglabra vel sparse pilifera
utrinque glandulo-punctata base saepe trinervata.
Inflorescentiae corymboso-paniculatae, ramis inferioribus
oppositis saepe recte patentibus. Capitula in
glomerulis irregularibus congesta; squamae involucri
subimbricatae 4-5-seriatae partim deciduae tomentosae
vel villosae et glanduliferae; receptacula plana et
glabra; flores 12-60; corollae infundibulares extus et
intus laeves, cellulis elongatis, parietibus sinuosis,
lobis longioribus quam latioribus extus glanduliferis;
filamenta in parte superiore distincta, cellulis
inferioribus subquadratis, parietibus leniter ornatis;
cellulae exothecialibus subquadratae, appendicibus
antherarum ovatis vel brevioribus; styli inferne glabri
non nodulosi, appendicibus stylium anguste linearibus
breviter papillosis apice clavatis sublaevibus.
Achaenia prismatica 5-costata superne sparse setifera
et glandulifera; carpodia breviter cylindrica, cellulis
superficialibus distinctis subquadratis minutis
ca. 8-10 seriatis, parietibus subincrassatis; setae

pappi 20-30 uniseriatae vel subbiseriatae scabridae superne leniter incrassatae, cellulis apicalibus sub-acutis. Grana pollinis 18-20 μ diam. minute spinulosa.
Species typica: Eupatorium plucheoides Griseb.

The species of Grisebachianthus may be determined with the following key.

1. Leaves with petioles 5-10 mm long -- G. carsticola
1. Leaves sessile, petioles usually less than 5 mm long ----- 2
 2. Heads with 30-60 flowers ----- 3
 2. Heads with 10-27 flowers----- 5
3. Anther appendage about half as long as wide, often strongly bilobed; leaves mostly pinnately veined
G. libanotica
3. Anther appendage about as long as wide, scarcely bilobed; leaves usually prominently trinerved from near base ----- 4
 4. Stems and undersurfaces of leaves brownish tomentose; leaf undersurface not closely reticulated; heads with 36-60 flowers
G. plucheoides
 4. Stems and undersurfaces of leaves whitish tomentose; leaf undersurface with prominent close reticulations; heads with 30-40 flowers
G. hypoleucus
5. Leaves with short tomentum below; heads with 10-12 flowers ----- G. nipensis
5. Leaves densely tomentose below; heads with 12-27 flowers ----- 6
 6. Stems and undersurfaces of leaves brownish tomentose; leaves broadly ovate to ovate-elliptical; phyllaries mostly obtuse
G. lanatanifolius
 6. Stems and undersurfaces of leaves whitish or grayish tomentose; leaves ovate to oblong-ovate; phyllaries often acute ----- 7

7. Leaves rough on upper surface ----- G. mayarensis
 7. Leaves shiny on upper surface ---- G. holquinensis

Our studies of the genus indicate that it contains the following eight species.

Grisebachianthus carsticola (Borhidi & Muniz) R.M.King & H.Robinson, comb. nov. Eupatorium carsticola Borhidi & Muniz, Acta Bot. Acad. Sci. Hungar. 18: 45. 1973.

Grisebachianthus holquinensis (B.L.Robinson) R.M.King & H.Robinson, comb. nov. Eupatorium holquinense B.L.Robinson, Contr. Gray Herb. n. s. 77:18. 1926. Much of the material in herbaria under the name E. hypoleucum belongs here. Syn? Eupatorium heterophyllum A. Rich. non Eupatorium heterophyllum D.C.

Grisebachianthus hypoleucus (Griseb.) R.M.King & H.Robinson, comb. nov. Eupatorium hypoleucum Griseb., Mem. Amer. Acad. n.s. 8:512. 1863.

Grisebachianthus lantanifolius (Griseb.) R.M.King & H. Robinson, comb. nov. Eupatorium lantanifolium Griseb. Mem. Amer. Acad. n.s. 8:511. 1863.

Grisebachianthus libanotica (Sch.-Bip.) R.M.King & H. Robinson, comb. nov. Eupatorium libanoticum Sch.-Bip., Journ. Bot. 1:234. 1863. syn. Eupatorium reticulatum A. Rich. non E. reticulatum Desv.

Grisebachianthus mayarensis (Alain) R.M.King & H.Robinson, comb. nov. Eupatorium mayarense Alain, Contr. Ocas. Mus. Hist. Nat. Col. 'de la Salle' Habana 18:5. 1960.

Grisebachianthus nipensis (B.L.Robinson) R.M.King & H. Robinson, comb. nov. Eupatorium nipense B.L.Robinson, Contr. Gray Herb. n.s. 77:25. 1926.

Grisebachianthus plucheoides (Griseb.) R.M.King & H. Robinson, comb. nov. Eupatorium plucheoides Griseb., Mem. Amer. Acad. n.s. 8:511. 1863.

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